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Exploring Barriers and Opportunities for Integrating Adolescent Sexual and Reproductive Health Services in Primary Health Care Facilities in Southern Ethiopia: Insights from a Qualitative Study

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Abstract

Background

Unmet needs for Adolescent Sexual and Reproductive Health (ASRH) information and services remain high in low- and middle-income countries, particularly in Ethiopia. Integrating ASRH services into primary health care facilities is widely recognized as a cost-effective and sustainable strategy to enhance access, quality, and continuity of care. Although Ethiopia has committed to implementing comprehensive and integrated ASRH services, the rollout remains uneven and insufficiently studied. Inconsistent integration at the primary health care level limits adolescents' familiarity with available services and results in missed opportunities for comprehensive care, suboptimal utilization, poor adherence, and persistent inequities. In Southern Ethiopia, there is limited evidence on the contextual barriers and enabling factors influencing effective service integration. Therefore, this study aimed to explore the barriers and opportunities for integrating ASRH services in primary health care facilities in Southern Ethiopia.

Methods

A qualitative study design was conducted in selected primary health care facilities in Southern Ethiopia. Purposive sampling was used to recruit key informants, including health care providers and facility managers involved in ASRH service delivery. Data were collected through key informant interviews and facility observation using semi-structured interview guides. All interviews were audio-recorded, transcribed verbatim, and translated into English. Data were analyzed using thematic analysis, following a systematic process of coding, categorization, and theme development. Measures to ensure trustworthiness included triangulation, member checking, and maintaining an audit trail. Ethical approval was obtained from Arba Minch University Institutional Review Board, and written consent was secured from all participants.

Result

The findings of this study revealed key barriers to providing integrated ASRH services, including inconvenient service hours, infrastructure limitations, inadequate privacy and confidentiality, limited training opportunities for service providers, weak reporting and feedback mechanisms, ineffective health education approaches, reliance on externally funded Non-Governmental Organization (NGO) projects, and limited involvement of adolescents and youth in program planning. Conversely, opportunities identified included existing adolescent volunteer and community networks for potential peer navigation, as well as health professionals' willingness to deliver integrated ASRH services through appropriate training and mentorship. Health professionals also emphasized the need to expand services to hotspot areas and underserved populations, and to address emerging issues such as mental health, substance use, suicidal behavior, and gender-based violence alongside ASRH.

Conclusions

The delivery of integrated ASRH services remains constrained by infrastructure limitations, inadequate provider training, weak monitoring systems, and limited adolescent and youth participation in program planning. Despite these challenges, the presence of active community and adolescent volunteer networks, coupled with the dedication of health professionals, offers a solid foundation for strengthening services. Strategic interventions that build provider capacity, actively engage youth, and harness community resources are critical to achieving sustainable, high-quality, and adolescent-centered ASRH service delivery.

INTRODUCTION

Integrated adolescent sexual reproductive health (ASRH) service delivery, is coordinating Sexual and Reproductive Health (SRH) services such as family planning, STI/HIV prevention, counseling, and referral within a single service platform, has been promoted to improve access, quality, and efficiency of care for adolescents (1, 2). Adolescents (10–19 years), with significant physical, psychological, and social transformations, comprise 16% of the global population. They face major SRH challenges, including unintended pregnancy, STIs, Unsafe abortion, and gender-based violence, which affect education, mental health, and long-term prospects, particularly in low- and middle-income countries (3–6).

Sub-Saharan Africa (SSA) carries a disproportionate burden, with high teenage pregnancy, unmet contraceptive needs, and limited confidential services (7–9). Barriers such as restrictive norms, stigma, gender inequality, and weak health systems exacerbate these issues (10, 11). Fragmented programs further reduce continuity of care. Integration at the primary health care level is therefore critical in resource-constrained settings, where evidence shows youth-friendly, integrated models enhance uptake, reduce stigma, and strengthen system performance. These problems are worse when SRH services are provided through separate, uncoordinated programs that make it harder for adolescents to get continuous and responsive care (2, 12).

Ethiopia has made strong policy commitments, including the National Adolescent and Youth Health Strategy and expansion of youth-friendly services (5, 13). Integration into primary healthcare is emphasized to improve equity and coverage, especially for rural adolescents. Yet implementation remains inconsistent due to shortages of trained providers, inadequate infrastructure, limited privacy, weak referral systems, and provider attitudes (11, 14, 15).

Most studies document barriers and facilitators through researcher-driven assessments, offering limited insight into how integration is operationalized in routine care (16, 17). Few explore actionable opportunities, particularly in Southern Ethiopia, where diverse sociocultural contexts and substantial adolescent SRH needs remain underrepresented.

Addressing this gap is essential for translating policy into sustainable practice. Qualitative, stakeholder – engaged approaches are valuable for capturing contextual and organizational factors shaping

integration and for generating implementation-relevant evidence (18–20). This study explores barriers, facilitators, existing activities, and stakeholder-driven strategies for integrated ASRH service delivery in primary health facilities in Southern Ethiopia. It aims to provide contextually grounded evidence to guide adaptation and strengthen implementation of integrated ASRH in low-resource settings.

METHODS and MATERIALS

Study Setting

This study was conducted in Arba Minch and the surrounding districts, covering both urban and rural communities served by a network of primary healthcare facilities. These facilities provide essential services, including ASRH, characterized by diverse socioeconomic and cultural contexts and demographic profiles. The setting is particularly relevant for this study, as it reflects the real-world challenges and opportunities in delivering integrated ASRH services across populations with varying access to healthcare, making it an ideal environment to examine barriers, facilitators, and potential strategies for adolescent-centered care.

Study Design

A phenomenological qualitative study was conducted to explore the barriers, opportunities, and practical strategies for strengthening integrated ASRH services in Southern Ethiopia. This approach allowed for an in-depth understanding of the lived experiences of healthcare providers and facility managers involved in ASRH service delivery.

Study Participants

The study purposively recruited healthcare providers and facility managers from selected primary healthcare facilities, as they are directly responsible for delivering ASRH services. These participants were selected for their extensive knowledge and firsthand experience regarding service availability, delivery models, accessibility, implementation challenges, and potential strategies to strengthen integrated ASRH services. Their perspectives provided critical insights into workforce capacity, operational constraints, and the feasibility of delivering comprehensive, adolescent-centered care.

Data Collection Procedure

Data were collected using a pretested semi-structured interview guide developed for in-depth interviews (**Annex I**). The guide was evaluated for clarity, cultural appropriateness, and the effectiveness of probing questions during the pretest. In addition, an observational checklist was employed to assess the physical environment, privacy and confidentiality, accessibility, information, education, and communication (IEC) activities in facilities, health professionals' competency documentation, and the availability of essential commodities and services. The checklist corroborated in-depth interview data regarding adolescent- and youth-friendly service environments.

Four trained data collectors conducted the interviews. Participant recruitment started on 01/08/2025 and ended on 30/08/2025. Each in-depth interview, lasting 45–90 minutes, was conducted by a pair of interviewers: one facilitated the interview while the other recorded field notes. All interviews were audio-recorded, and two supervisors closely monitored the process to ensure quality. Supervisors reviewed the data collection, listened to the audio records, and guided the transcription and analysis. Data collection continued until thematic saturation was reached. Observations of outpatient departments and adolescent/youth services were conducted with prior consent from the health facility heads. The observation of the health facilities Adolescent and youth service was conducted with a semi structured observation checklist (**Annex II**). To experienced data collectors have observed the health fasciitis after taking consent from the Health center Head.

Data management and analysis

All the interviews were tape-recorded, transcribed, and translated on the day the interview was conducted. Interviewers have conducted the transcription and translation while checking and correcting using an audit (field note). Experienced investigators have cross-checked the transcribed and translated data. Analysis of the data was conducted using the thematic analysis method with ATLAS. ti software version 7.5.18. After repeated readings of the translated transcripts, the data were independently reviewed and coded by members of the research team based on emerging concepts. Final codes were refined and agreed upon through consensus among all investigators. Themes were developed by categorizing similar coding into one group and renaming them by taking the study's objective and interview guide into consideration. The study findings were presented using both narrative descriptions and tabular summaries. Illustrative quotes were selected for their ability to vividly convey participants' perspectives and to enrich the narrative findings.

Trustworthiness

Trustworthiness was rigorously ensured throughout the study. Each interview was conducted by two interviewers. One interviewer was fluent in the local language and culturally familiar with the study setting to address linguistic and cultural sensitivities, while the second interviewer, who was not from the study area, provided an independent perspective to minimize contextual bias. Audio recordings and comprehensive field notes were systematically used to verify and refine transcriptions and translations, including the documentation of relevant nonverbal cues. A clear audit trail was maintained to document all stages of data collection and analysis. Methodological triangulation was achieved by integrating interview data with observational findings to validate characteristics of the adolescent and youth-friendly service infrastructure. In addition, analytic triangulation was undertaken by two investigators (NBS and YA), with all coding and interpretive discrepancies resolved through discussion and consensus. Thick and detailed descriptions were employed to enhance the rigor, transparency, and applicability of the findings.

RESULT

The themes were barriers, opportunities, the underserved population, and emerging Adolescents' health needs for integrated youth-friendly services. Meanwhile, the discussion is organized along the gaps identified and the efforts needed to have an effective and enhanced integrated adolescent health service at the primary healthcare level.

Barriers to the Delivery of Integrated Adolescent Sexual and Reproductive Health Services

Limited and Fragmented service packages

Some health professionals claimed that the focus of youth-friendly service (YFS) is medical and counseling services. It was raised that adolescents usually came for medical services and would ask for sexual and reproductive health counseling along with it. Health professionals felt that Adolescents are not getting the youth-friendly services on a full scale and of good quality they deserve. No health center provided a comprehensive abortion care and family planning service at the youth-friendly service window. They have to be linked to the maternal and child health service unit of their own health center. Meanwhile, the counseling for these services is provided in the YFS outpatient department. Some health centers do not give antiretroviral therapy (ART) service, so they have to refer patients if they find HIV-positive patients.

A 32-year-old male AYFS focal person explained:

For the abortion service, they will be linked to the Maternal and Child Health (MCH) service. If it is beyond our capacity, they will be referred. If we believe the Adolescents are sexually active, we will give counseling and link them to MCH for getting family planning services. We will give only counseling at the Outpatient department (OPD) for abortion and family planning services.

Inconvenient service hours

The current service is provided from morning until 11 AM [local time, afternoon], while during the evening, at night, on weekends, and on holidays, the service is unavailable in almost all health centers. Reproductive services like condom provision, abortion care service, pregnancy test, and family planning user adolescents usually come early in the morning, in the evening, or on weekends. This is because they do not want to be seen by the community, and students are free from school at these times. The current service schedule limits access to the adolescent services.

A 30-year-old female health center head explained:

They usually come in the morning. However, some young people with special cases, for example, if they are a teenager who is pregnant, if they are a woman who wants to get a pregnancy check, or if they are,

men who want to get condoms, they come between 7:00 A.M. and 8:00 A.M., or between 11:00 P.M. and 12:00 A.M. That is when they come most often

Inadequate infrastructure

Health professionals felt that the current rooms are uncomfortable and need a construction for counseling, examination, and recreation. Having a narrow room for examination and counseling was perceived as a good opportunity for youth-friendly service since it requires privacy. Observational findings confirmed that none of the health centers had a dedicated recreation room, and the existing service rooms did not provide adequate auditory privacy. Only one health center had a youth-friendly service building that was accessible to clients with disabilities (**Annex III**).

Privacy was repeatedly identified as a major concern.

A 37-year-old male AYFS focal person explained:

Privacy is one of the main issues. For example, when I take a history here, people in the waiting room can hear the conversation. This can cause embarrassment or even discrimination. It would be better if privacy were improved, such as by relocating the waiting area. Another issue is that the recreational facilities—like the playground, tennis, chess, and other games—are outdated and currently out of service.

Concerns about confidentiality and privacy

Health professionals claimed that Adolescents need more confidentiality and privacy than other populations. Adolescents will first check the people inside the health center, including the health professionals, before they seek health services. Adolescents did not want to get health services from health professionals whom they knew outside the health center. Adolescents are afraid to come to health centers, especially for sexual and reproductive health services like abortion and pregnancy tests. Usually, in some areas, such issues led to three dead infants being abandoned in the forest. Participants said that health professionals should strictly keep the confidentiality and privacy of adolescents.

A 28-year-old male AYFS focal person explained:

Adolescents need privacy. They usually check the people inside the health center and even health professionals before deciding to get the service. In our area, Adolescents are afraid of coming to us. We have found two or three dead infants who were abandoned in the forest. They are afraid to come to the health center for abortion services. They think people will see them. They are also afraid of health professionals if they know them. Most services are free, so it is their right.

It was raised that the new integrated OPD placard should not have the word “reproductive” since adolescents get frustrated when they see the sign as reproductive. They do not want to be taken as they came to the health center for reproductive services. Since the integrated service will address such

concerns, adolescents will totally accept it. Health professionals mentioned that adolescents usually conceal their SRH needs, and service providers should give provider-initiated services from a critical point of view.

Lack of a feedback mechanism

No health centers have a mechanism for collecting feedback from their clients (Adolescents), while some Health professionals mentioned that they only gain feedback when they meet their clients outside the health center by chance.

A 33-year-old male AYFS service provider explained:

Our feedback system does not include adolescents. If we involve them, it will help share information on reproductive health services. We plan to do this in the future.

Weak monitoring and evaluation

Health professionals boldly stated a gap in the monitoring and evaluation of youth-friendly services. Lack of a strong monitoring and evaluation system within the health center for adolescent-friendly services was mentioned as a weakness. Especially, the authorities like health facilities, Woreda, and Zone health departments were blamed for the current weakened monitoring and evaluation system. Previously, private health centers had to report health data to governmental health centers, which helped to provide a quality, friendly service (control abortion). However, due to a lack of monitoring and evaluation, they are not reporting currently.

A 32-year-old male AYFS focal person explained:

“Especially, the private health sectors have almost no linkage with us. They will only refer medical-legal cases to avoid legal court cases. Previously, they used to report cases to us, like tuberculosis. However, there was no monitoring and evaluation by higher bodies. Therefore, the reporting has ceased now”.

Insufficient training and mentorship

Shortage of trained health professionals was a challenge to commence the integrated service. There were limited trained health professionals who were providing Comprehensive Abortion Care (CAC), family planning, and mental health services. Even health center heads and focal health professionals were not aware of the training that health professionals in their health centers had taken. Moreover, the trained health professionals were not assigned to the health services for which they were trained. The health professionals needed sexual and reproductive health training and mentorship in CAC, family planning, and adolescent mental health services. Some health professionals raised that Risk assessment tools, such as those for risky sexual behaviors, are more needed to provide a quality ASRH service.

A 37-year-old male AYFS focal person stated:

I have received basic HIV/AIDS testing training and YFS training. However, we still have some training needs. For example, we need the latest version of the Abortion Training for those who have not yet received it. Therefore, we need training in family planning and abortion care services.

Limited Human resource

Health professionals have noticed that adolescents have a preference for health professionals of the same sex. Some mentioned that female adolescents prefer female health professionals at YFS OPD, even at the delivery service, while some mentioned they prefer the opposite sex.

A 28-year-old male AYFS focal person explained:

Adolescents have preferences for the sex of health professionals. However, currently, we are not giving the service according to their preference. Female Adolescents prefer female health professionals. Even at delivery, they oppose getting service from male health professionals.

Health professionals' myth

Some health professionals taught that something bad would happen to them if they provided abortion services. A female health professional had repeated miscarriages, and she perceived this happened due to her providing abortion services.

A 28-year-old male AYFS focal person described the situation:

For example, a girl worked with us in abortion care. When she became pregnant herself, she unfortunately had multiple miscarriages. Because of this, she believed that working in abortion care had cursed her, so she stopped working in that area.

Insufficient Information dissemination, education, and health learning materials

In all the health centers, there was a schedule for morning health education; however, they were not practicing accordingly. The morning health education was focused on communicable and non-communicable illnesses. Health professionals acknowledged that adolescent sexual and reproductive health topics, like condom utilization, HIV, delivery, abortion, and family planning, were ignored in these sessions. Before providing such health education, creating awareness regarding the availability of the service to the community and adolescents was a priority for the health professionals. It was raised that Health centers rarely give health education and counseling to adolescents in their schools. Such engagements are usually practiced in outbreak seasons like malaria. Long ago, some had a mass HIV testing that was conducted at schools.

A 28-year-old male services provider stated:

We are not giving a regular morning health education. I believe it is beneficial to give this education. On our schedule, we usually consider communicable and non-communicable diseases like malaria and Diabetes Mellitus (DM). We should incorporate ASRH-related health education in the future.

There were very limited health learning materials in all the health centers, which were donated by NGOs. The current health learning materials were criticized for having too much information and leading adolescents to lose interest. Health professionals preferred to have contextually prepared leaflets, brochures, flipcharts, models, and audio-video messages to educate the adolescents. The current counseling service is given only orally. The lack of a recreation room led the professionals to put the Television (TV) and other donated materials in storage. Participants suggested including topics such as self-HIV testing, condom use, sexually transmitted infections, female reproductive anatomy, and mental health issues, such as suicide prevention, in health learning materials. Observations revealed that only two health centers had displayed posters and learning materials, with just one maintaining up-to-date resources **(Annex III).**

A 32-year-old male service provider explained:

"Yes, we usually give oral counseling only. Like steps of using a condom are needed as a health learning material. Recently, I have taken training on self-HIV testing. If there were a health learning material available for it, it would be great".

Community stigma and peer shaming

Some societies had a stigma and a negative attitude toward adolescents who came to health facilities alone by themselves. They will take them for being rude. This had created fear and discouragement in adolescents from seeking ASRH.

Adolescents mocking their own peers who utilize sexual and reproductive services were raised to be barriers. Harmful traditional practices of female genital mutilation and early marriage were practiced among some communities, which health professionals call for urgent intervention to avoid such culturally rooted practices.

Financial Constraint

Most ASRH-related services (like pregnancy testing and family planning) were free, and community-based health insurance was raised as a strategy in place for adolescent health. However, it was mentioned that even though abortion services are free, adolescents have to pay for some materials like medicines and gloves. The health centers, woreda and zone health departments, and NGOs were asked to work in collaboration to create fully free ASRH services.

A 30-year-old female facility manager explained:

Usually, it (abortion service) is free. We might refer some abortion cases to the Primary Hospital. They might be asked to buy medicines from private pharmacies. At these times, they spend up to a thousand

birr [Ethiopian currency]. If they cannot afford this, they have to have an unwanted pregnancy up to delivery (sadness in his face).

Weak higher Administrative and inter-sectoral engagement

Gaps in the provision of Adolescent Sexual and Reproductive Health (ASRH) were observed during the transition period of the chief executive officer and following the relocation of some health centers. Such gaps led to a loss of monitoring and evaluation and a huge amount of resources. Participants emphasized that higher-level administrative bodies, including woreda and zonal health departments, should take a more active role in supporting and supervising health centers to ensure continuity and quality of ASRH services. Additionally, engagement at the community level was highlighted as critical. Health professionals suggested that kebeles could play a key role in reaching adolescents through discussion forums, youth health teams, campaigns, sports activities, and other community-based initiatives.

A 35-year-old male facility manager noted:

The Woreda health department can do a lot. The Zone health department does not have much engagement with us. The kebeles can help us reach the community. There is a youth league and a female league under kebele administration. We can use them.

Absence of a Communication Network

Health professionals acknowledged the importance of establishing a communication network linking governmental health centers, private health sectors, schools, adolescents, and other relevant stakeholders. However, none of the health centers currently have such a network in place. The absence of coordinated communication has led to inefficiencies, including underutilization of available resources. For example, some health centers reported having medical kits that were not distributed to schools for extended periods due to a lack of communication.

Sustainability concerns

The sustainability of different initiative projects commenced by NGOs and other stakeholders was in question for their sustainability. Many initiatives would immediately weaken and cease after the projects are phased out. Similar concern was raised for the integrated adolescent health service.

A 47-year-old male facility manager explained:

Such service was originally launched by projects, but when the project ended, the work began to weaken. When the project was functioning, it kept moving forward because it could be stimulating. Nevertheless, once it stopped, the work kept weakening—almost to the point of disappearing.

Opportunities for Delivering Integrated Adolescent Sexual and Reproductive Health Services

Existing Service Infrastructure and Active Adolescent and Youth Service Delivery

In this study, an NGO called Amref Health Africa built a youth-friendly service OPD. The buildings built had three rooms for examination, counseling, and recreation; however, due to a shortage of rooms, the health centers used the rooms for other health service purposes.

In these health centers, all have a designated youth-friendly outpatient service department (OPD) where all adolescents aged from 10 years up to 24 years old will get health services. The adolescents would be directed from triage to the OPD directly. The health centers provide 13 packages, including regular medical service, SRH-related services like HIV testing, STIs, comprehensive abortion care, pregnancy testing, nutritional assessment and malnutrition therapy, family planning, mental health, and counseling services.

A 32-year-old male AYFS focal person explained:

Firstly, as any client comes to the health facility, they will engage with the triage. If they are aged 10 to 24 years, they will be referred to the YFS OPD. For whatever service they came for, we will counsel them on SRH-related issues like HIV, STIs, and unsafe abortion. We also conduct a nutritional assessment".

Routine reporting system

Health centers report the YFS service to the woreda health departments monthly, which will go to higher officials, including the Ministry of Health. Reporting is done by using the DHIS2 software. Health professionals mentioned that Teenage pregnancy, abortion, new HIV positive cases, family planning, and condom distribution are areas of interest to higher bodies.

A 32-year-old male AYFS focal person explained:

There is a monthly report to the national ministry of health. Currently, I am not sure about the reminders. There are special indicators that the regional health bureau wants. For instance, teenage pregnancy, abortion, new HIV positive cases, and family planning users are needed in special cases. There is even a special format for these services.

Acceptance of Integrated ASRH Services by Health Professionals

All health centers and their staff expressed strong support for the implementation of integrated ASRH services, viewing them as feasible and beneficial. While some facilities identified the need for additional dedicated rooms, others noted that existing services could be integrated by reallocating medical equipment from the Maternal and Child Health unit to the youth-friendly service (YFS) OPD.

A 35-year-old male facility manager explained:

We are ready to provide the service in an integrated fashion. We can move some instruments from MCH and provide the holistic service. If training is given for health professionals, we can move the instruments into the Adolescents' room. It is easy to provide the services. We have an examination bed already.

Willingness of Health Professionals for Extended Duties

Health professionals acknowledged the need to provide youth-friendly services during the evenings, at night, on weekends, and on holidays, including implementing a 24-hour shift system. They observed that adolescents often visit health centers outside regular working hours (sunrise to sunset), and offering services during these times would improve accessibility and utilization.

Participants noted that appropriate incentives or duty-time compensation would be important for motivating staff and ensuring sustained engagement in these extended service hours.

A 28-year-old male services provider stated:

“We are not currently giving service on the weekends. It would be beneficial for Adolescents. It is acceptable for us. Having compensation for duty payment would motivate the health professionals to work hard and happily. ”

Available communication channels

This needs to be addressed through health education. Local media, namely Gamo TV, local FM radio, and social media (Facebook, Telegram, and TikTok), were mentioned as means for transmitting the health education. In highland areas, where many community members do not own TVs or radios, volunteer messengers and community meetings were suggested as practical alternatives for reaching out to adolescents and families.

A 29-year-old female services provider stated:

“... *Therefore, it is acceptable and feasible for us. Gamo TV and FM are currently gaining attention from the community. FM professionals on malaria have recently interviewed us. I believe these two would reach the community”.*

Proposed Call Center for Communication

Health professionals supported the idea of establishing a call center to improve communication with adolescents and facilitate access to youth-friendly services. It was suggested that trained adolescents could serve as advocates, helping peers schedule appointments at convenient times. Health extension workers were also identified as key facilitators for outreach and appointment coordination. While providing counseling over the phone was considered challenging, the call center could effectively support scheduling, information dissemination, and initial guidance.

A 28-year-old male service provider explained:

“It is acceptable. The health extension workers can make this feasible as well. They will go on outreach, teach the adolescents, and make appointments for those who need our service.”

School structure

The health professionals mentioned that school mini media and school health clubs could work with health centers to make this happen. Schools having a designated room for school health were acceptable and feasible to health professionals. Almost all recommended that schools should hire their own health professionals to work at the school and have a referral linkage with the health centers.

A 29-year-old female services provider stated:

“Health extension workers have been giving health education in collaboration with school health clubs. The health education is strengthened in outbreaks. We have gaps in here. We can incorporate with health extension workers to give health education. The health clubs could schedule while health extension workers and health professionals can give the service. Therefore, it is acceptable and feasible for us.”

Potential Social and Adolescents’ Network

Training and deploying selected adolescents to the catchment areas of the health centers. Outreach activities during the summer time were taken as an opportunity. Engaging health extension workers, mothers' health groups, and the female health army were mentioned as strategies to reach out to parents and mothers, while hotspot areas and using religious churches were for adolescents. Counseling and basic ASRH can be given in the outreach. Using trained adolescents to reach their peers was described as a strategy. These attained adolescents will have a role in reaching hard-to-reach adolescents, referring to health centers, and providing peer-to-peer education, especially for sexual and reproductive health.

A 30-year-old female health center head stated:

… There is no peer education training that provides peers to educate the young people. If they train, they can do many things for us, just like a Bego Melktegna (volunteer messenger). There is no widespread understanding in society that the service targets young people.

Supporting NGOs and stakeholders

The contribution of NGO, especially Amref Health Africa, was enormous for adolescent health services. Amref built all the YFS buildings in the health centers, and most trainings on adolescent services were given by Amref as well. The building was standard with three rooms for examination, counseling, and recreation (waiting). Necessary equipment, including recreation and education materials like TV and health learning materials, was supported. One health center used a room, which was primary buily by an NGO for the purpose of malaria survey.

Underserved Populations

Health professionals identified several underserved adolescent populations whose sexual and reproductive health needs are not adequately met by existing services. Clinics primarily cover areas with high concentrations of **hotels, bars, and restaurants**, where many adolescent female sex workers reside. These adolescents require specialized outreach, as their work schedules do not align with standard YFS operating hours, and they often require greater privacy than other clients.

Other hotspot areas include **Gamo and Paradise farming lands**, where daily laborers face numerous SRH risks. These adolescents typically work throughout the day and may only seek services at night, when roads are unsafe, and YFS services are unavailable. Health professionals also highlighted that **disabled adolescents** have equal SRH needs, but parents sometimes restrict their mobility, limiting access.

Additional groups of interest include adolescents who are **motorcyclists** or spend time around **football fields**, as well as female adolescents in highland areas who are harder to reach due to migration to towns.

A 37-year-old male AYFS focal person explained the need to reach the underserved adolescent population:

Many are on the streets, in shops, sports areas, or just sitting around. There are also female sex workers (FSWs) working in clubs. They are part of the community we need to reach.

Giving entrepreneurship training and creating job opportunities for the marginalized population, like female sex workers, was mentioned as an empowerment strategy to address their economic hardship.

A 47-year-old male facility manager explained:

It would also be helpful to have training for those who enter sex work due to economic hardship. For example, providing entrepreneurship skills so they can find alternative income sources.

Emerging Adolescents' Health Needs

Along with the integrated adolescent sexual and reproductive health service, related integrated adolescent health needs were raised. Mental health services, road traffic accidents, substance abuse, and gender-based violence were rising health issues for adolescents in the community. Motorcyclists usually caused the road traffic accidents, while suicidal attempts were committed due to a fight between adolescents and parents regarding the purchase of a motorcycle. Those adolescents whose parents could not purchase a motorcycle were attempting suicide by poisoning themselves. Substance abuse was another issue mentioned that led to group fights among adolescents. The migration of rural resident adolescents to the town has necessitated the need for adolescent-friendly services.

A 28-year-old male services provider

There are serious suicidal attempts around here, especially among Adolescents. Next to suicidal attempts are traffic accidents related to motorcycle transportation.

DISCUSSION

All health centers and health professionals have agreed that the integrated adolescent health service be given in one OPD. They believe that it is relevant and feasible at their centers through addressing existing gaps. WHO and PAHO fully support the integration of primary health care and public health services (21, 22). Integration of adolescents into primary health care was effective in enhancing health knowledge, beliefs, and adolescents' satisfaction in Assiut governorate (23). There is a need to conduct implementation and trial studies to assess the effectiveness of the integrated adolescent health services.

The focus of youth-friendly service (YFS) was on medical services rather than sexual and reproductive services, which need more attention. Adolescents are afraid to utilize sexual and reproductive services from health centers. They usually come for medical services and get SRH services on their way. Adolescents are afraid of getting services for abortion, family planning, HIV and STI testing, pregnancy test, condom, and family planning, among other SRH services. This is due to fear of being judged and stigmatized by the community and peers if they knew about them using the above SRH services. This is supported by studies in Rwanda, Kenya, Ethiopia (11, 24, 25), and a systematic review conducted in the Asia Pacific countries (26). Health professionals in this study recommended that ASRH services should be a provider-initiated service.

An exaggerating factor was that the service time of ASRH was inconvenient for adolescents. Those who seek SRH service usually come to health centers early in the morning, late in the evening, on weekends, and on holidays. However, the youth-friendly service is not available at these times. Research in South Africa, Nigeria, and Ethiopia supports the finding (27–30). Efforts should be made so that integrated adolescent health services are available 24 hours a day and seven days a week. Health professionals only demanded an incentive for working during these hours. This would enhance accessibility of the services to adolescents.

There was a significant gap in the monitoring and evaluation of youth-friendly services by focal units, health centers, town health bureaus, woreda health bureaus, and zonal health departments. Despite reproductive services like Teenage pregnancy, abortion, new HIV positive cases, family planning, and condom distribution being a focus of interest for higher bodies during regular reporting, no health center can provide abortion care, family planning, and ART at the YFS room. This shows a significant research-to-practice and data-to-decision gap. Such gaps, data being collected merely for reporting, not for decision-making is a widely identified gap in Ethiopia (31, 32). Data collected from surveillance and research should be used to develop and revise policies and make decisions. Researchers should engage more in research dissemination and policy briefing to advocate their findings to local authorities and policymakers.

Regarding the capacity to run an integrated adolescent health service, there is a shortage of health professionals, especially trained professionals for CAC, family planning, and mental health services. Training and capacity building are well-accepted strategies (16) that are effective in enhancing service uptake by clients and the capacity of health professionals (33)(34). However, the trained health professionals are not well-documented and assigned to the service for which they have been trained. Following, assessing health professionals' willingness to provide the service should be a prerequisite. Along with this, some health professionals have a negative attitude toward providing abortion services, believing that bad things will happen to them from providing the services. This finding is supported by studies in Ethiopia (35) and South Africa (36). VCAT for the abortion service is essential to deal with such barriers. Studies showed VCAT had a significant effect in changing attitude, knowledge, and intention towards abortion (37, 38). This indicates that skill training is not sufficient on its own. A randomized control trial in Ethiopia showed that VCAT led to a change in the knowledge and attitude of health professionals toward abortion (39). Therefore, Ethiopia should prepare a national VCAT for abortion, just like family planning (40). The preference of adolescents over the sex of health professionals should also be considered when commencing the service.

Announcing the availability of an integrated adolescent health service to the community and adolescents was a priority for health professionals. Addressing community and peer misconceptions and stigma (41–43) for adolescents utilizing ASRH is essential to make adolescents feel free to utilize and adhere to the service. Morning health education at health centers needs to include adolescent health in their schedules. Using local mass media like Gamo-TV and Radio was a choice for communities in the lowland areas; however, using community meetings and volunteer messengers was ideal for reaching out to highland communities. Health education, supported with health learning materials, is effective in enhancing knowledge, positive habits, and beliefs in adolescents (44, 45). Health centers need contextualized, locally prepared visual learning HLMs, including leaflets, brochures, flipcharts, models, and audio-video messages, to educate adolescents. Regarding the content, self- HIV testing, condom utilization, sexually transmitted illness, female reproductive organ models, and mental health issues, such as suicide, were their areas of health learning materials.

An integrated approach should include mental health services, road traffic accidents, substance abuse, and gender-based violence, which are becoming contemporary and rising health issues for adolescents in the community. Similar overlapping of these health issues was noticed in different studies (46–49). The integrated adolescent service needs to integrate these services along with the sexual and reproductive health service. Integrating a call center with a hotline into Adolescent youth service could contribute largely to related health service needs of adolescents, like addressing mental health crisis (50, 51) and suicide risk (52). On top of this, adolescents will be able to call the center, make appointments at their convenience, and enhance accessibility of the integrated service.

Adolescent female sex workers, daily laborers, and disabled adolescents were marginalized groups despite their numerous ASRH needs. This is supported by studies across the globe (41, 53–55). Motorcyclists and adolescents on football grounds were the population of interest. The integrated

service should consider economic empowerment to reduce the financial costs of ASRH. Exempting adolescents from any ASRH cost, and providing community-based health insurance, creating job opportunities, and entrepreneurship training were suggested as solutions to minimize barriers and enable adolescents.

Some health center professionals burden the outreach adolescent services on health extension workers, which was observed in the communication network, health team, outreach activities, and others. This approach is not supported as the Health extension workers in Ethiopia are overburdened, facing many challenges and burnout (56–58). However, using trained adolescents to reach those above hard-to-reach adolescents, providing peer-to-peer education, making appointments over the call center, and referring them was raised as an ideal solution. Peer navigation is found to be effective in HIV services, mental health, and substance abuse while addressing marginalized populations as well (59–62). This needs to be tested in a contextualized manner to integrate adolescent health services.

The contribution of NGOs like Amref Health Africa in the enhancement of adolescent health services in infrastructure and capacity building was huge. However, health centers still have wide infrastructural needs. Being dependent on NGOs and initiative projects was concerning since most services have a tendency to cease following the phasing out of the projects by NGOs. This issue was noted in studies conducted in low and middle-income countries (63, 64), including Ethiopia (65). Integrated adolescent services need to consider the sustainability of the service before commencing it.

The findings of this study call for the development, testing, and implementation of an integrated adolescent reproductive health service into the primary care system. It should address the needs of abortion, family planning, mental health, gender based violence, substance abuse, marginalized populations in hotspot areas, and attitude and treatment transformation of health professionals. Strategies such as peer navigation, call center, capacity building (abortion and family planning, value clarification, and attitude clarification), economic empowerment, strengthening monitoring and evaluation, adolescent and community engagement, and school health are recommended.

Abbreviations

ART: Antiretroviral therapy; **ASRH:** Adolescent Sexual and Reproductive Health; **AYFS:** Adolescents and Youth Friendly Service; **CAC:** Comprehensive Abortion Care; **DM:** Diabetes Mellitus; **DHIS2:** District Health Information System 2; **HIV:** Human Immunodeficiency Virus; **HLMs:** Health Learning Materials; **IEC:** Information, education, and communication; **MCH:** Maternal and Child Health service; **NGOs:** Non-Governmental Organizations; **OPD:** Outpatient Department;; **PAHO:** Pan American Health Organization (PAHO); **SRH:** Sexual and Reproductive; **TV:** Television; **WHO:** World Health Organization **VCAT:** Value Clarification and Attitude Transformation.

Declarations

Ethics approval and consent to Participate

Ethical Considerations

This study was conducted in accordance with the Declaration of Helsinki. Ethical approval was obtained from the Institutional Review Board (IRB) of Arba Minch University, College of Medicine and Health Sciences (Approval No: IRB/23339/25) on May 20th, 2025, before data collection. Written informed consent was obtained from all participants. To ensure confidentiality, privacy, and anonymity, identifying information was removed from all reports, and participant identifiers were used only by the research team for internal purposes. Data collection occurred in private settings, participation was voluntary, and participants were informed of their right to withdraw at any time without consequences. All reported data were anonymized to prevent identification by family members, community members, or healthcare providers.

Consent for publication

Not applicable.

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Competing interests

The authors declare that they have no competing interests.

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